

Patent claims:

1. A training device (1) with actuating elements (2,  
5 3) which can be moved continuously in rotation and  
are connected to one another and are intended for  
a pair of limbs of a person, means (4) for driving  
and/or braking the actuating elements (2, 3), and  
an electronics unit (8) for regulating and/or  
10 controlling the movement of the actuating elements  
(2, 3), wherein the electronics unit (8) is  
designed to bring the respective speed of the  
actuating elements, in each case in a portion in  
the area of dead centers of the rotary movement of  
15 the actuating elements, to a predetermined value,  
but to permit between said portions an  
acceleration of the actuating elements (2, 3) if a  
person training applies a targeted torque in a  
predetermined direction of movement of the  
20 actuating elements (2, 3).
2. The training device in accordance with the  
preamble of claim 1, in particular claim 1,  
wherein the electronics unit (8) is designed to  
25 bring the respective speed of the actuating  
elements, in each case in a portion in the area of  
dead centers of the rotary movement of the  
actuating elements, to a predetermined value,  
preferably to a substantially identical value, and  
30 wherein the electronics unit (8) can accelerate  
the actuating elements (2, 3), between the  
portions in the area of the dead centers, to a  
predetermined higher speed than within the  
portions, even if no activity is taking place,  
35 i.e. no targeted torque is being applied by a  
person training.
3. The training device as claimed in claim 1 or 2,  
wherein the parameters for a possible rotation

speed profile between the portions in the area of the dead centers can be predetermined via the electronics unit (8).

- 5    4.    The training device as claimed in one of the preceding claims, wherein the respective rotation speed between the portions in the area of the dead centers is limited to a maximum value in the range of 7 to 17 revolutions per minute.
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5.    The training device as claimed in one of the preceding claims, wherein the electronics unit (8) is designed to bring the actuating elements (2, 3) to a standstill in the respective portion in the area of the dead centers.
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6.    The training device as claimed in claim 5, wherein the electronics unit (8) is designed to change the direction of rotation of the actuating elements (2, 3) after each standstill.
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7.    The training device as claimed in claim 5, wherein the electronics unit (8) is designed to change the direction of rotation after a dead center has been reached two or more times.
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